

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Claims 1, 9, 10, 13, 14, 21 and 29 are amended to clarify the claimed subject matter.

Claim 27 is amended for cosmetic reasons. New claims 30 and 31 are added. Support is provided at least at application paragraphs [0064], [0065] and [0071]. (References herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to the referenced embodiments.)

No new matter is believed to be added by any of these amendments.

It is submitted that the amendments to claim 27 overcome the objection at pages 2 of the Office Action.

Claims 1, 7, 9, 10, 16, 17, 22 and 29 stand rejected under 35 USC 102(b) as being anticipated by Williamson (US 5,991,269) (referred to as “Williamson”). Claims 2-5 are rejected under 103(a) as being unpatentable over Williamson (US 5,991,269) in view of Sohner (US 5,991,269) (referred to as “Sohner” hereinafter). Claim 8 is rejected under 103(a) as being unpatentable over Williamson (US 5,991,269) in view of Sohner (US 5,991,269) in view of Quigley (US 2001/0055319A1). Claims 11-12 are rejected under 103(a) as being unpatentable over Williamson (US 5,991,269) in view of Ikami (US 2003/0206160A1). Claims 15, 18-20 and 28 are rejected under 103(a) as being unpatentable over Williamson (US 5,991,269) in view of Cern (US 2004/0109499A1). Claim 21 is rejected under 103(a) as being unpatentable over Williamson (US 5,991,269) in view of Abraham (US 6,407,987 B1). Claim 23 is rejected under

103(a) as being unpatentable over Williamson (US 5,991,269) in view of Barlev (US 7,133,441 B1). Claims 24-26 are rejected under 103(a) as being unpatentable over Williamson (US 5,991,269) in view of Kodama (US 2003/0156014 A1).

To the extent that these rejections may be applied to the amended claims presented herein, the Applicants respectfully traverse based on the points set forth below.

Regarding claims 1 and 29, as background to this invention, it is noted that in multi-carrier communication, transmission power is controlled for respective sub-carriers of the transmitting side based on information measured by the receiving side. However, the fact that it is necessary to communicate between the transmitting and receiving sides in order to control the transmission power renders such a communication system to have a complex construction in that aspect.

An object of the present invention is to overcome the above-discussed disadvantages by providing a communication apparatus, communication system and communication method, which enables control of the transmission power by detection and control only on the transmitting side. The invention involves, *inter alia*, a transmission signal controller for controlling a transmission power of the second transmission signal generated by the transmission signal generator based on a radiation power in a transmission line in correspondence with a frequency of the sub carrier of the first transmission signal generated by the transmission signal generator (see claims 1 and 29).

Pages 2-3 of the office action cite Williamson. Page 3, lines 14-15 state that Williamson employs a primary modem 40 and a secondary modem 46 to achieve transmission power control. The Applicants note that Williamson discloses that modem 40 is in communication with

secondary modem 46 via the wireline communication system 42-44 (see col. 5, lines 17-19 and Fig. 2 of Williamson). When the modem 40 receives a training sequence from the secondary modem 46, balance is calculated based on the training sequence. Controller 71 of modem 40 makes an assessment as to whether the balance exceeds a predetermined threshold level. In the negative, the sub-channel carrier is rejected (see col. 7, lines 12-32 and Fig. 3 of Williamson). The modem 40 reduces the transmission power on that channel to zero (see col. 4, line 31 of Williamson). That is, the modem controls a transmission power of a transmission signal based on a balance calculated by a transmission signal transmitted from the secondary modem, rather than by a transmission signal transmitted from the modem itself.

Accordingly, Williamson lacks any disclosure of the present claimed subject matter of, *inter alia*, a transmission signal controller for controlling a transmission power of the second transmission signal generated by the transmission signal generator based on a radiation power in a transmission line in correspondence with a frequency of the sub carrier of the first transmission signal generated by the transmission signal generator (see claims 1 and 29).

Accordingly, it is submitted that Williamson does not disclose the subject matter of claims 1 and 29, and thus no rejection under 35 USC 102 is warranted.

Claims 2-28 and 30 depend directly or indirectly from claim 1 and thus are deemed to be allowable due to their dependence from an allowable claim and also due to their recitation of subject matter that provides an individual basis for their individual allowability.

Regarding new claim 31, this claim defines a communication apparatus including a transmission signal generator, a comparator, a transmission signal controller and a transmitter. The transmission signal generator generates a transmission signal. The comparator compares a

radiation power in a transmission line with a predetermined value. The radiation power is corresponding to a frequency of each of the plurality of sub carriers. The transmission signal controller controls transmission power of the generated transmission signal in such a manner that the radiation power is less than the predetermined value if the radiation power exceeds the predetermined value. The transmitter transmits the transmission signal having the controlled transmission power.

Claim 31 incorporates the subject matter of the former claim 2. The Office Action cites in pages 7-8 Sohner against former claim 2. Sohner refers to an FCC intentional radiation emission limit (see col. 3, lines 4-6 and col. 7, lines 2-7). However, Sohner fails to disclose or suggest the feature of claim 31 directed to a transmission signal controller for controlling transmission power of the generated transmission signal in such a manner that the radiation power is less than the predetermined value if the radiation power exceeds the predetermined value.

Accordingly, it is submitted that Sohner does not disclose or suggest the subject matter of claim 31, and thus no rejection under 35 USC 102 or 103 is warranted.

Accordingly, in light of the foregoing, it is submitted that all pending claims are directed to allowable subject matter, and a notice of allowance is respectfully requested.

A personal interview with the examiner and his SPE is respectfully requested. The undersigned has telephoned the examiner regarding such proposed interview, and a return telephone call is requested.

If any issues remain which may best be resolved through a telephone communication, the examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

Date: January 15, 2009

James E. Ledbetter
Registration No. 28,732

JEL/att

Attorney Docket No. 008612.06110
Dickinson Wright PLLC
1875 Eye Street, NW, Suite 1200
Washington, DC
20006
Telephone: 202.457.0160
Facsimile: 202.659.1559